

ABSTRACT OF THE DISCLOSURE

Air flows along pressure surfaces and suction surfaces of main blades of an inner blade group by rotation of an impeller. When the air passes the inner blade group, the air flowing along the suction surfaces of the main blades tends to separate from the suction surfaces, and shearing flows tend to be formed behind outer diameter end portions of the main blades. Here, the auxiliary blades of the outer blade group are placed inside the air flows passing between the main blades of the inner blade group, and therefore the auxiliary blades restrain the separation of air flows, and the shearing flows.